# City of Atlanta Police Officers' Pension Fund

**Actuarial Valuation and Review as of July 1, 2024**



Segal

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June 12, 2025

Board Members
City of Atlanta Pension Investment Board
Atlanta, Georgia

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of July 1, 2024 for the City of Atlanta Police Officers' Pension Fund (Fund). It summarizes the actuarial data used in the valuation, analyzes the preceding year's experience, and establishes the funding requirements for the fiscal year ending June 30, 2026.

This report has been prepared in accordance with generally accepted actuarial principles and practices for the exclusive use and benefit of the Board, based upon information provided by Strategic Benefits Advisors and financial information provided by Mauldin & Jenkins.

This is the first valuation report prepared by Segal. Prior year reports were prepard by Southern Actuarial Services. Prior year information was based on the July 1, 2023 valuation report, dated June 19, 2024. For historical information not included in this report, please refer to past reports.

Segal does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. To the extent we can, however, Segal does review the data for reasonableness and consistency. Based on our review of the data, we have no reason to doubt the substantial accuracy of the information on which we have based this report and we have no reason to believe there are facts or circumstances that would affect the validity of these results.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

Board Members
June 12, 2025

The actuarial calculations were directed under the supervision of Jeanette R. Cooper. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate, except as noted in Section 4. The assumptions used in this actuarial valuation were selected by the Board based upon our analysis and recommendations. In our opinion, the assumptions are reasonable and take into account the experience of the Plan and reasonable expectations. In addition, in our opinion, the combined effect of these assumptions is expected to have no significant bias.

Segal makes no representation or warranty as to the future status of the Fund and does not guarantee any particular result. This document does not constitute legal, tax, accounting or investment advice or create or imply a fiduciary relationship. The Board is encouraged to discuss any issues raised in this report with the Fund's legal, tax and other advisors before taking, or refraining from taking, any action.

***We hereby certify that the City of Atlanta Police Officers' Pension Fund has been funded in conformity with the minimum funding standards specified in Code Section 47-20-10 of the Official Code of Georgia Annotated known as the Public Retirement Systems Standards Law. This certification covers the 2024 fiscal year of the Fund.***

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

Segal

Jeanette R. Cooper

Jeanette R. Cooper, FSA, FCA, MAAA, EA
Vice President and Consulting Actuary

Ben Kirkland, FSA, FCA, MAAA, EA
Consulting Actuary

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# Section 1: Actuarial Valuation Summary

## Purpose and basis

This report has been prepared by Segal to present a valuation of the City of Atlanta Police Officers' Pension Fund as of July 1, 2024. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits.

The contribution requirements presented in this report are based on:

- The benefit provisions of the Fund, as administered by the Board;
- The characteristics of covered active participants, inactive vested participants, and retired participants and beneficiaries as of June 30, 2024, provided by Strategic Benefits Advisors;
- The assets of the Fund as of June 30, 2024, provided by Mauldin & Jenkins;
- Economic assumptions regarding future salary increases and investment earnings;
- Other actuarial assumptions regarding employee terminations, retirement, death, etc. and
- The funding policy adopted by the City.

Certain disclosure information required by GASB Statements No. 67 and 68 as of June 30, 2025 and June 30, 2024 for the Fund is provided in separate reports.

## Valuation highlights

- This July 1, 2024 valuation is used to establish the actuarially determined contribution (ADC) for the fiscal year July 1, 2025 to June 30, 2026. The ADC is adjusted for interest to the middle of the fiscal period and satisfies the minimum funding standards under Georgia law Code Section 47-20-10.
- Segal strongly recommends an actuarial funding method that targets 100% funding of the actuarial accrued liability. Generally, this implies payments that are ultimately at least enough to cover normal cost, interest on the unfunded actuarial accrued liability and the principal balance. The funding policy adopted by the City meets this standard. The Fund receives 11.75% of base salary (8% through December 31, 2024) for employees hired after August 31, 2011 and Hybrid Participants, and 12% or 13% of base salary for employees hired before September 1, 2011. The City contributes the ADC, which is net of employee contributions. The ADC is comprised of the employer normal cost, including administrative expenses, and a payment to amortize the Unfunded Actuarial Accrued Liability (UAAL) over 17 years. The amortization payment is calculated using a level percentage of payroll method where payroll is assumed to increase 3% annually.
- The ADC for the upcoming year is $47,164,567, a decrease of $1.3 million from last year. The contribution as a percentage of projected payroll decreased from 40.66% of projected payroll to 34.19% of projected payroll, based on a 17-year level percent-of-payroll amortization of the unfunded actuarial accrued liability.
- Actual contributions made during the year ending June 30, 2024 of $44,299,000 were 100% of the ADC. In the prior year, actual contributions of $40,974,000 were 100% of the prior year ADC.
- The UAAL is projected to be fully amortized in the fiscal year ending June 30, 2042.
- The actuarial gain of $133,353,415, or 7.4% of actuarial accrued liability (AAL) prior to any plan or assumption changes, is primarily due to a change in actuarial firm with different software, including the software's application of the actuarial funding method. The change in actuarial firm represents an actuarial gain of 8.2% of AAL. Investment gains account for 0.1% of AAL. Offsetting these gains was a net demographic loss of 0.9% of AAL and a minor loss on administrative expenses. The demographic loss was mainly attributable to cost-of-living increases greater than assumed, and a small number of active participants who were hired between September 1, 2011 and October 31, 2011 who were reclassified to reflect their participation in the 2010 Plan.
- The rate of return on the market value of assets was 11.06% for the year ending June 30, 2024. The return on the actuarial value of assets was 7.19% for the same period due to the recognition of prior years' investment gains and losses. This resulted in a small actuarial gain when measured against the assumed rate of return of 7.00%. We advise the Board to continue to monitor actual and anticipated investment returns relative to the assumed long-term rate of return on investments of 7.00%.

# Section 1: Actuarial Valuation Summary

- The actuarial value of assets is 99.86% of the market value of assets. The investment experience in the past years has only been partially recognized in the actuarial value of assets. If the net deferred gain of $2.1 million were recognized immediately in the actuarial value of assets, the ADC would decrease from 34.19% to about 34.06% of projected payroll.
- Ordinance 24-O-1453 was signed into law on September 3, 2024. Under this ordinance, participants hired between July 1, 2010 and August 31, 2011 who were actively employed on January 1, 2025 were eligible to elect to be covered under the same provisions as those hired prior to July 1, 2010. All participants in this Fund elected to be covered under the provisions for those hired prior to July 1, 2010. Specifically:
  - Normal Pension eligibility changed from age 55 with 15 years of service to age 55 with 10 years of service.
  - The benefit multiplier increased from 2% to 3%.
  - The cap on the monthly benefit amount decreased from 100% to 80% of Average Monthly Salary.
  - Early retirement eligibility changed from any age with 15 years of service to any age with 10 years of service.
  - The multiplier used in the recalculated monthly amount payable at normal retirement for surviving disabled participants increased from 2% to 3%.
  - The vesting schedule for participants with 10 or more years of service changed from 50% at 10 years, increasing 5% per year until reaching 70% at 14 years, followed by 100% at 15 years to 100% at 10 years or more.

  As a result of these plan changes, the employer normal cost as of the beginning of year increased $0.6 million and the AAL increased by $10.1 million. The total impact was an increase in the ADC of $1.5 million, or 1.1% of projected payroll.
- Ordinance 24-O-1377 was signed into law on July 2, 2024. This ordinance improved benefits for participants hired after August 31, 2011 and Hybrid Plan participants, who were still employed on January 1, 2025. The new ordinance also applies to anyone hired on or after January 1, 2025. Specifically:
  - Normal Pension eligibility changed from age 57 with 15 years of service to age 57 with 10 years of service.
  - The benefit multiplier changed from 1% to a tiered formula.
  - The salary averaging period decreased from 120 months to 60 months.
  - The cap on the monthly benefit amount decreased from 80% to 70% of Average Monthly Salary.
  - Early retirement eligibility was changed from age 47 with 15 years of service to age 47 with 10 years of service.
  - Disability benefits were modified to incorporate the new eligibility and benefit amounts.
  - The vesting schedule for participants with 10 or more years of service changed from 50% at 10 years, increasing 5% per year until reaching 70% at 14 years, followed by 100% at 15 years to 100% at 10 years or more.
  - The service for calculating Normal Pension eligibility, Early Retirement eligibility, Vesting, and benefit amounts was updated to include unused sick leave.

- The employee contribution rate was increased from 8% to 11.75%.
- The cap on the COLA was increased from 1% to 2%.

As a result of these plan changes, the employer normal cost as of the beginning of year increased $2.2 million and the AAL increased by $32.7 million. The total impact was an increase in the ADC of $5.1 million, or 3.7% of projected payroll.

- The following actuarial assumptions were changed with this valuation:
  - A new assumption was introduced to adjust salary to use the greater of base salary and annualized salary for participants with less than one year of service as well as participants whose service increased by less than one year from the prior year.
  - In conjunction with Ordinance 24-O-1377, the following assumptions were changed for participants whose benefits changed under this ordinance:
    - The vacation pay adjustment was changed from increasing the retirement benefit by 2.25% to increasing it by 4.75%. This change was made to reflect the decrease in the average pay period from 120 months to 60 months.
    - An additional 0.50 years of service is being added to total service prior to the application of the 70% maximum to reflect that unused sick leave is now being included in benefit service.
    - The annual COLA increase assumption was increased from 1% to 2%. This change was made to reflect the increase in the COLA cap from 1% to 2%.

  The salary adjustment change was included in the gain/loss. All of the assumption changes made in conjunction with Ordinance 24-O-1377 were measured as part of the plan changes.
- The funded ratio (the ratio of the actuarial value of assets to actuarial accrued liability) is 80.23%, compared to the prior year funded ratio of 75.47%. This ratio is one measure of funding status, and its history is a measure of funding progress. Using the market value of assets, the funded ratio is 80.34%, compared to 72.98% as of the prior valuation date. These measurements are not necessarily appropriate for assessing the sufficiency of the plan assets to cover the estimated cost of settling the Plan's benefit obligation or the need for or the amount of future contributions.
- The UAAL is $364.7 million, which is a decrease of $94.5 million from last year's UAAL of $459.2 million, mainly due to the change in actuarial firm.

## Risk

- It is important to note that this actuarial valuation is based on plan assets as of June 30, 2024. The Fund's funded status does not reflect short-term economic fluctuations but rather is based on the market value on the last day of the plan year. Segal is available to prepare projections of potential outcomes of market conditions and other demographic experience upon request.
- Since the actuarial valuation results are dependent on a given set of assumptions, there is a risk that emerging results may differ significantly as actual experience proves to be different from the assumptions. We have not been engaged to perform a detailed analysis of the potential range of the impact of risk relative to the Fund's future financial condition but have included a brief discussion of some risks that may affect the Fund in Section 2. A more detailed assessment would provide the Board with a better understanding of the inherent risks and could be important for the Fund because:
  - Relatively small changes in investment performance can produce large swings in the unfunded liabilities.
  - Retirees and beneficiaries in pay status account for 66% of the Fund's liabilities, leaving fewer options for reducing costs in the event of adverse experience.
  - Recent changes in the plan of benefits may result in participant choices that vary from those assumed.
  - The Board have not had a detailed risk assessment in recent years.

## Summary of key valuation results

| Valuation Result | Current | Prior |
|---|---|---|
| **Contributions for fiscal year beginning:** | **July 1, 2025** | **July 1, 2024** |
| • Actuarially determined employer contributions | $47,164,567 | $48,493,502 |
| • Actuarially determined employer contributions as a percent of projected payroll | 34.19% | 40.66% |
| **Actuarial accrued liability for plan year beginning:** | **July 1, 2024** | **July 1, 2023** |
| • Retired participants and beneficiaries | $1,221,644,661 | $1,225,957,896 |
| • Inactive vested participants | 7,948,725 | 6,170,841 |
| • Inactive participants due a refund of employee contributions | 2,623,723 | 2,410,681 |
| • Active participants | 612,668,919 | 637,620,665 |
| • **Total** | **$1,844,886,028** | **$1,872,160,083** |
| • Normal cost including administrative expenses | 31,990,936 | 22,147,926 |
| **Assets for plan year beginning July 1:** | **2024** | **2023** |
| • Market value of assets (MVA) | $1,482,273,000 | $1,366,224,000 |
| • Actuarial value of assets (AVA) | 1,480,152,515 | 1,412,951,452 |
| • Actuarial value of assets as a percentage of market value of assets | 99.86% | 103.42% |
| **Funded status for plan year beginning July 1:** | **2024** | **2023** |
| • Unfunded actuarial accrued liability on market value of assets | $362,613,028 | $505,936,083 |
| • Funded percentage on MVA basis | 80.34% | 72.98% |
| • Unfunded/(overfunded) actuarial accrued liability on actuarial value of assets | $364,733,513 | $459,208,631 |
| • Funded percentage on AVA basis | 80.23% | 75.47% |
| • Amortization period on an AVA basis | 17 | 18 |

# Section 1: Actuarial Valuation Summary

| Valuation Result | Current | Prior |
|---|---|---|
| **Key assumptions:** | | |
| • Net investment return | 7.00% | 7.00% |
| • Inflation rate | 2.25% | 2.25% |
| • Across-the-board payroll increase | 3.00% | 3.00% |
| **Demographic data for plan year beginning July 1:** | **2024** | **2023** |
| • Number of retired participants and beneficiaries | 1,786 | 1,758 |
| • Number of inactive vested participants | 79 | 87 |
| • Number of inactive participants due a refund of employee contributions | 451 | 421 |
| • Number of active participants | 1,591 | 1,554 |
| • Covered payroll for upcoming year | $133,933,118 | $115,804,477 |
| • Average covered payroll for upcoming year | 84,182 | 74,520 |
| • Projected payroll for year following upcoming year | 137,951,112 | 119,278,611 |

## Important information about actuarial valuations

An actuarial valuation is a budgeting tool with respect to the financing of future projected obligations of a pension plan. It is an estimated forecast – the actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

In order to prepare a valuation, Segal relies on a number of input items. These include:

| Input Item | Description |
|---|---|
| **Plan provisions** | Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits. |
| **Participant information** | An actuarial valuation for a plan is based on data provided to the actuary by the plan administrator. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data. |
| **Financial information** | Part of the cost of a plan will be paid from existing assets — the balance will need to come from future contributions and investment income. The valuation is based on the asset values as of the valuation date, typically reported by the auditor. A snapshot as of a single date may not be an appropriate value for determining a single year's contribution requirement, especially in volatile markets. Plan sponsors often use an "actuarial value of assets" that differs from market value to gradually reflect year-to-year changes in the market value of assets in determining the contribution requirements. |
| **Actuarial assumptions** | In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of participants in each year, as well as forecasts of the plan's benefits for each of those events. In addition, the benefits forecasted for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan's assets. All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions are selected within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model may use approximations and estimates that will have an immaterial impact on our results. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong. |

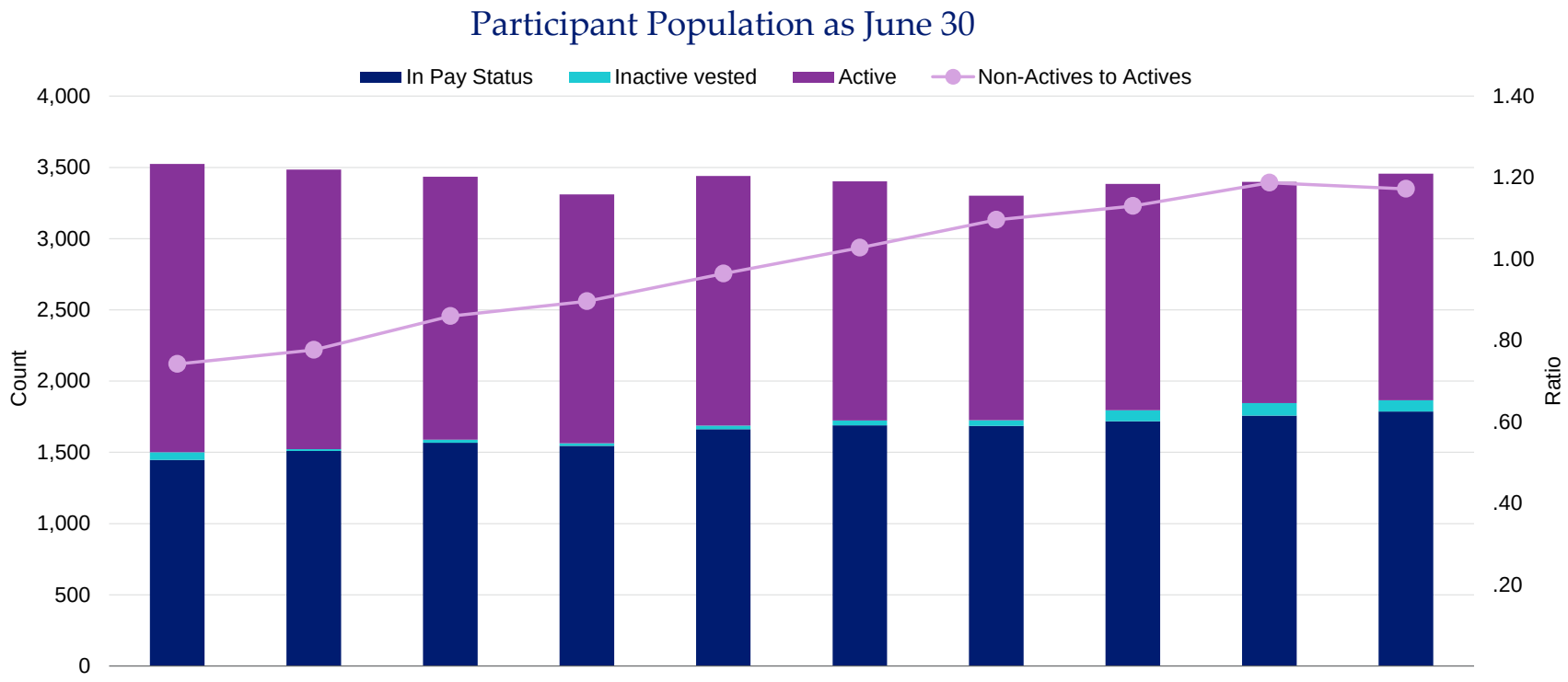
# Section 1: Actuarial Valuation Summary

The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

- The actuarial valuation is prepared at the request of the Board. Segal is not responsible for the use or misuse of its report, particularly by any other party.
- An actuarial valuation is a measurement at a specific date — it is not a prediction of a plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of financial measurements, except where otherwise noted.
- If the Board is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
- Segal does not provide investment, legal, accounting, or tax advice and is not acting as a fiduciary to the Fund. The valuation is based on Segal's understanding of applicable guidance in these areas and of the Fund's provisions, but they may be subject to alternative interpretations. The Board should look to their other advisors for expertise in these areas.
- While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.
- Segal's report shall be deemed to be final and accepted by the Board upon delivery and review. Trustees should notify Segal immediately of any questions or concerns about the final content.

# Section 2: Actuarial Valuation Results

## Participant information




| Legend | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|---|---|---|---|
| In Pay Status | 1,446 | 1,510 | 1,568 | 1,546 | 1,662 | 1,689 | 1,685 | 1,718 | 1,758 | 1,786 |
| Inactive Vested[1] | 55 | 13 | 20 | 18 | 26 | 35 | 41 | 78 | 87 | 79 |
| Active | 2,023 | 1,962 | 1,847 | 1,746 | 1,751 | 1,678 | 1,575 | 1,589 | 1,554 | 1,591 |
| Ratio | 0.74 | 0.78 | 0.86 | 0.90 | 0.96 | 1.03 | 1.10 | 1.13 | 1.19 | 1.17 |

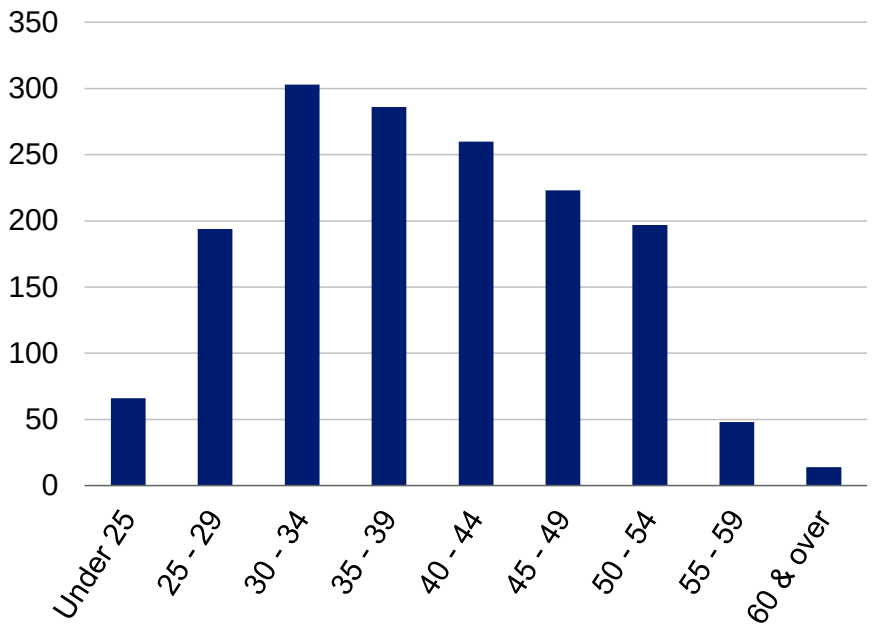
[1] Excluding terminated participants due a refund of employee contributions.

## Active participants

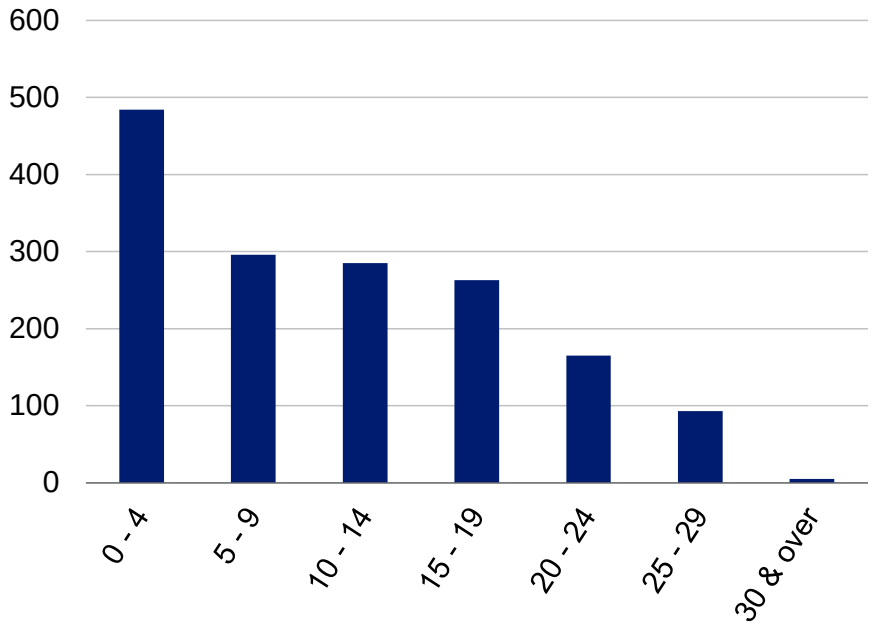
| Demographic Data | June 30, 2024 | June 30, 2023 | Change |
|---|---|---|---|
| Active participants | 1,591 | 1,554 | 2.4% |
| Average age | 39.6 | 39.8 | -0.2 |
| Average years of service | 11.2 | 10.9 | 0.3 |
| Average compensation | $84,182 | $74,520 | 13.0% |

Distribution of Active Participants as of June 30, 2024

Actives by Age




Actives by Years of Service



## Inactive participants

In this year's valuation, there were 79 inactive participants with a vested right to a deferred or immediate vested benefit.

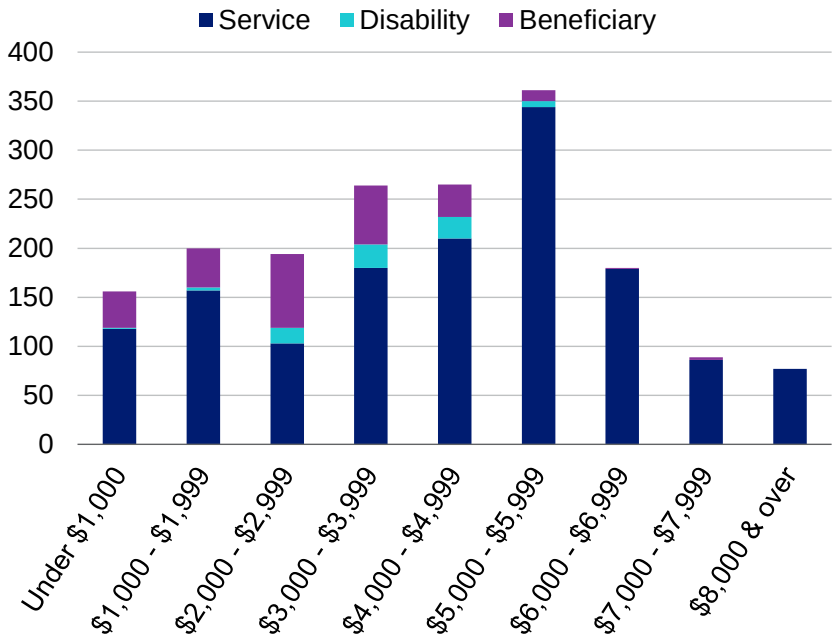
In addition, there were 451 inactive participants entitled to a return of their employee contributions.

## Retired participants and beneficiaries

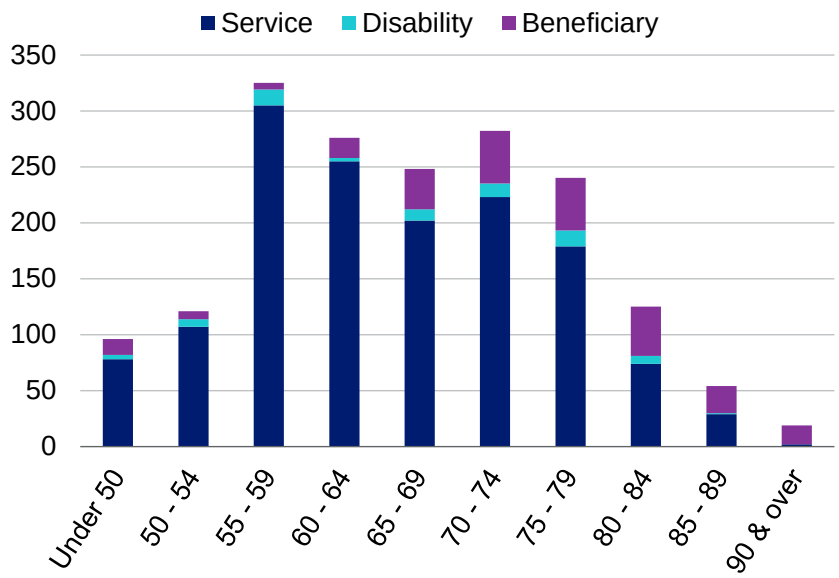
| Demographic Data | June 30, 2024 | June 30, 2023 | Change |
|---|---|---|---|
| Retired participants | 1,526 | 1,501 | 1.7% |
| Beneficiaries | 260 | 257 | 1.2% |
| Average age | 66.9 | 66.5 | 0.4 |
| Average amount | $4,225 | $4,109 | 2.8% |
| Total monthly amount | $7,546,267 | $7,224,383 | 4.5% |

### Distribution of Retired Participants and Beneficiaries as of June 30, 2024

#### By Type and Monthly Amount



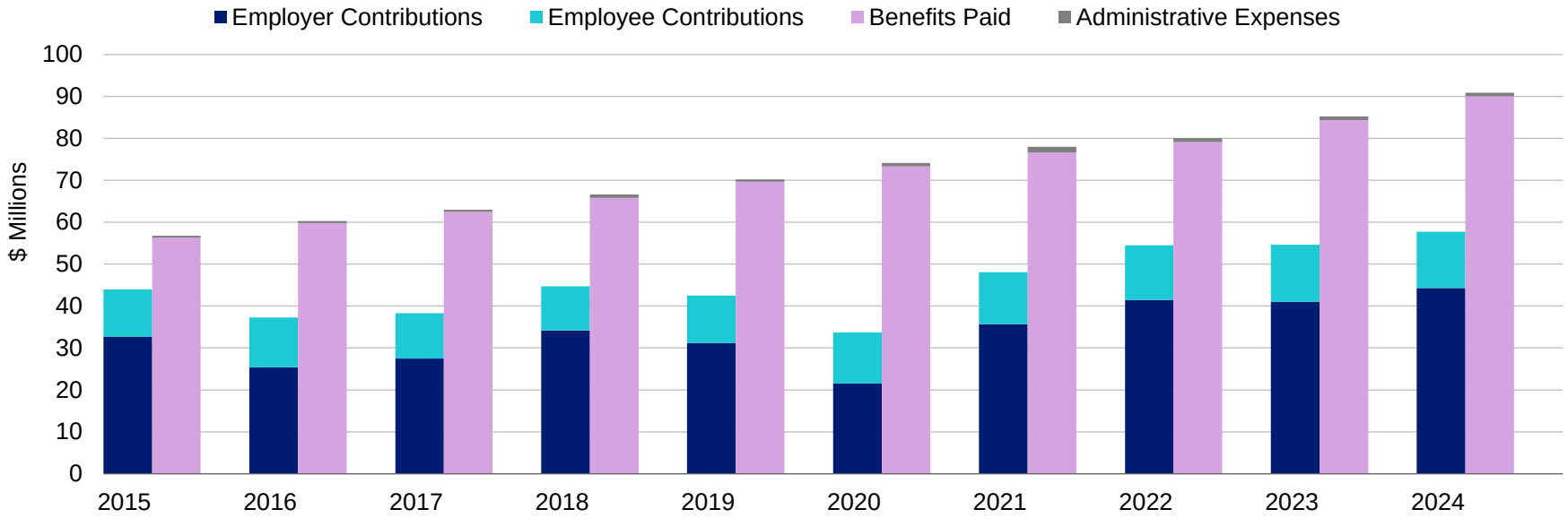

#### By Type and Age



## Financial information

Retirement plan funding anticipates that, over the long term, both contributions (less administrative expenses) and investment earnings (less investment fees) will be needed to cover benefit payments. Retirement plan assets change as a result of the net impact of these income and expense components.

Comparison of Contributions Made with Benefits and Expenses Paid
for Years Ended June 30



# Section 2: Actuarial Valuation Results

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable. The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

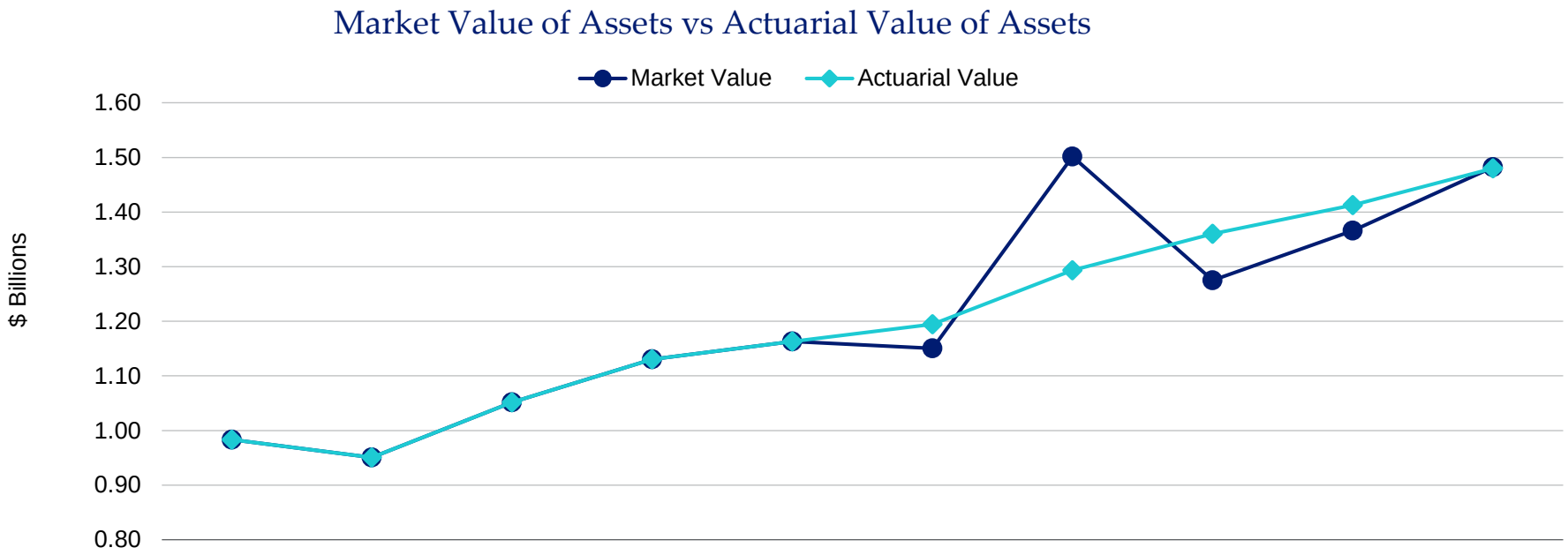
## Determination of Actuarial Value of Assets for Year Ended June 30, 2024

| | Item | Original Amount[1] | Percent Deferred[2] | Unrecognized Amount[3] | Amount |
|---|---|---|---|---|---|
| 1. | Market value of assets, June 30, 2024 | | | | $1,482,273,000 |
| 2. | Calculation of unrecognized return | | | | |
| a. | Year ended June 30, 2024 | $54,756,690 | 80% | $43,805,352 | |
| b. | Year ended June 30, 2023 | 33,334,954 | 60% | 20,000,972 | |
| c. | Year ended June 30, 2022 | -305,015,729 | 40% | -122,006,292 | |
| d. | Year ended June 30, 2021 | 301,602,264 | 20% | 60,320,453 | |
| e. | Year ended June 30, 2020 | -55,134,421 | 0% | 0 | |
| **f.** | **Total unrecognized return** | | | | **$2,120,485** |
| **3.** | **Preliminary actuarial value: (1) - (2f)** | | | | **1,480,152,515** |
| 4. | Adjustment to be within 20% corridor | | | | 0 |
| **5.** | **Final actuarial value of assets as of June 30, 2024: (3) + (4)** | | | | **$1,480,152,515** |
| 6. | Actuarial value as a percentage of market value: (5) ÷ (1) | | | | 99.9% |
| 7. | Amount deferred for future recognition: (1) - (5) | | | | $2,120,485 |

[1] Total return minus expected return on a market value basis.
[2] Percent deferred applies to the current valuation year.
[3] Recognition at 20% per year over five years. Deferred return as of June 30, 2024 recognized in each of the next four years:

| | |
|---|---|
| a. Amount recognized on June 30, 2025 | 16,935,636 |
| b. Amount recognized on June 30, 2026 | -43,384,818 |
| c. Amount recognized on June 30, 2027 | 17,618,329 |
| d. Amount recognized on June 30, 2028 | 10,951,338 |

## Asset history for years ended June 30




| Legend | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|---|---|---|---|
| Market value[1] | $0.98 | $0.95 | $1.05 | $1.13 | $1.16 | $1.15 | $1.50 | $1.28 | $1.37 | $1.48 |
| Actuarial value[1] | 0.98 | 0.95 | 1.05 | 1.13 | 1.16 | 1.19 | 1.29 | 1.36 | 1.41 | 1.48 |
| Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.04 | 0.86 | 1.07 | 1.03 | 1.00 |

[1] In $ billions

## Actuarial experience

Assumptions should consider experience and should be based on reasonable expectations for the future.

Each year actual experience is compared to that projected by the assumptions. Differences are reflected in the actuarial valuation.

Assumptions are not changed if experience different than expected is believed to be a short-term development that will not continue over the long term. On the other hand, if experience different than expected is expected to continue, assumptions are changed.

### Actuarial Experience for Year Ended June 30, 2024

| | Source | Amount |
|---|---|---|
| 1. | Net gain/(loss) from investments | $2,637,831 |
| 2. | Gain/(loss) from administrative expenses | -58,534 |
| 3. | Net gain/(loss) from change in actuarial firm | 147,514,509 |
| 4. | Net gain/(loss) from other experience | -16,740,391 |
| **5.** | **Net experience gain/(loss): 1 + 2 + 3 + 4** | **$133,353,415** |

## Investment experience

Actuarial planning is long term. The obligations of a pension plan are expected to continue for the lifetime of all its participants.

The assumed long-term rate of return of 7.00% considers past experience, the asset allocation policy of the Board and future expectations.

### Investment Experience for Year Ended June 30

| | Item | 2024 Market Value | 2024 Actuarial Value |
|---|---|---|---|
| 1. | Net investment income | $149,231,000 | $100,383,063 |
| 2. | Average value of assets | 1,349,633,000 | 1,396,360,452 |
| 3. | Rate of return: **1 ÷ 2** | 11.06% | 7.19% |
| 4. | Assumed rate of return | 7.00% | 7.00% |
| 5. | Expected investment income: **2 x 4** | $94,474,310 | $97,745,232 |
| **6.** | **Net investment gain/(loss): 1 – 5** | **$54,756,690** | **$2,637,831** |

## Non-investment experience

### Administrative expenses

Administrative expenses for the year ended June 30, 2024 totaled $841,000, as compared to the assumption of $758,321. This resulted in an experience loss of $58,534 for the year, including an adjustment for interest. Because it is expected that these expenses will continue to increase, the actuarial assumption includes an annual 2.25% inflationary increase.

### Change in actuarial firm

This year's change to a new actuarial firm produced a $147,514,509 gain. The gain is attributable to different software, including the software's application of the actuarial funding method.

### Other experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- Mortality experience (more or fewer than expected deaths)
- The extent of turnover among participants
- Retirement experience (earlier or later than projected)
- The number of disability retirements (more or fewer than projected)
- Salary increases (greater or smaller than projected), and
- Inflationary cost-of-living adjustments higher or lower than anticipated.

The net loss from this other experience for the year ended June 30, 2024 amounted to $16,740,391, which is 0.9% of the actuarial accrued liability. This year's loss is mainly due to:

- Cost-of-living increases for participants in pay status hired prior to September 1, 2011 receiving a 3% COLA for the year ending December 31, 2023. This is higher than the 2.25% assumption.
- There were also a small number of active participants who were hired between September 1, 2011 and October 31, 2011 who were reclassified to reflect their participation in the 2010 Plan.

## Plan provisions

- Ordinance 24-O-1453 was signed into law on September 3, 2024. Under this ordinance, participants hired between July 1, 2010 and August 31, 2011 who were actively employed on January 1, 2025 were eligible to elect to be covered under the same provisions as those hired prior to July 1, 2010. All participants in this Fund elected to be covered under the provisions for those hired prior to July 1, 2010. Specifically:
  - Normal Pension eligibility changed from age 55 with 15 years of service to age 55 with 10 years of service.
  - The benefit multiplier increased from 2% to 3%.
  - The cap on the monthly benefit amount decreased from 100% to 80% of Average Monthly Salary.
  - Early retirement eligibility changed from any age with 15 years of service to any age with 10 years of service.
  - The multiplier used in the recalculated monthly amount payable at normal retirement for surviving disabled participants increased from 2% to 3%.
  - The vesting schedule for participants with 10 or more years of service changed from 50% at 10 years, increasing 5% per year until reaching 70% at 14 years, followed by 100% at 15 years to 100% at 10 years or more.

  As a result of these plan changes, the employer normal cost as of the beginning of year increased $0.6 million and the AAL increased by $10.1 million. The total impact was an increase in the ADC of $1.5 million, or 1.1% of projected payroll.

- Ordinance 24-O-1377 was signed into law on July 2, 2024. This ordinance improved benefits for participants hired after August 31, 2011 and Hybrid Plan participants, who were still employed on January 1, 2025. The new ordinance also applies to anyone hired on or after January 1, 2025. Specifically:
  - Normal Pension eligibility changed from age 57 with 15 years of service to age 57 with 10 years of service.
  - The benefit multiplier changed from 1% to a tiered formula.
  - The salary averaging period decreased from 120 months to 60 months.
  - The cap on the monthly benefit amount decreased from 80% to 70% of Average Monthly Salary.
  - Early retirement eligibility was changed from age 47 with 15 years of service to age 47 with 10 years of service.
  - Disability benefits were modified to incorporate the new eligibility and benefit amounts.
  - The vesting schedule for participants with 10 or more years of service changed from 50% at 10 years, increasing 5% per year until reaching 70% at 14 years, followed by 100% at 15 years to 100% at 10 years or more.
  - The service for calculating Normal Pension eligibility, Early Retirement eligibility, Vesting, and benefit amounts was updated to include unused sick leave.

- The employee contribution rate was increased from 8% to 11.75%.
- The cap on the COLA was increased from 1% to 2%.

As a result of these plan changes, the employer normal cost as of the beginning of year increased $2.2 million and the AAL increased by $32.7 million. The total impact was an increase in the ADC of $5.1 million, or 3.7% of projected payroll.

## Actuarial assumptions

- The following actuarial assumptions were changed with this valuation:
  - A new assumption was introduced to adjust salary to use the greater of base salary and annualized salary for participants with less than one year of service as well as participants whose service increased by less than one year from the prior year.
  - In conjunction with Ordinance 24-O-1377, the following assumptions were changed for participants whose benefits changed under this ordinance:
    - The vacation pay adjustment was changed from increasing the retirement benefit by 2.25% to increasing it by 4.75%. This change was made to reflect the decrease in the average pay period from 120 months to 60 months.
    - An additional 0.50 years of service is being added to total service prior to the application of the 70% maximum to reflect that unused sick leave is now being included in benefit service.
    - The annual COLA increase assumption was increased from 1% to 2%. This change was made to reflect the increase in the COLA cap from 1% to 2%.

    The salary adjustment change was included in the gain/loss. All of the assumption changes made in conjunction with Ordinance 24-O-1377 were measured as part of the plan changes.

The Board sets assumptions for the Fund based on periodic multi-year experience studies. The last study was completed for the five-year period ended June 30, 2019, and it is anticipated that the assumptions will next be reviewed for the five-year period ended June 30, 2024.

# Unfunded/(overfunded) actuarial accrued liability

## Development of Unfunded Actuarial Accrued Liability for Year Ended June 30, 2024

| | Component | Amount |
|---|---|---|
| 1. | Unfunded/(overfunded) actuarial accrued liability at beginning of year | $459,208,631 |
| 2. | Normal cost at beginning of year | 22,147,926 |
| 3. | Total contributions | -57,713,000 |
| 4. | Interest on 1, 2 & 3 | 31,675,004 |
| 5. | Expected unfunded/(overfunded) actuarial accrued liability | 455,318,561 |
| 6. | Changes due to: | |
| | a. Net experience (gain)/loss[1] | -133,353,415 |
| | b. Plan provisions | 42,768,367 |
| | c. Total changes | -90,585,048 |
| **7.** | **Unfunded/(overfunded) actuarial accrued liability at end of year** | **$364,733,513** |

[1] Includes $147,514,509 gain due to change in actuarial firm.

## Actuarially determined contribution

The actuarially determined contribution is equal to the employer normal cost payment and a payment on the unfunded actuarial accrued liability. As of July 1, 2024, the actuarially determined contribution is $47,164,567, or 34.19% of projected payroll.

The City specifies the funding policy used to calculate the actuarially determined contribution based on a closed amortization period of 30 years, established with the July 1, 2011 valuation. As of July 1, 2024, there are 17 years remaining on this schedule. The 2024 and 2023 ADC amounts shown in the chart are payable for the fiscal years ending June 30, 2026 and June 30, 2025, respectively.

### Actuarially Determined Contribution

| Component | 2024 Amount | 2024 Percent of Projected Payroll | 2023 Amount | 2023 Percent of Projected Payroll |
|---|---|---|---|---|
| 1. Total normal cost | $31,225,778 | 22.64% | $21,389,605 | 17.93% |
| 2. Administrative expenses | 765,158 | 0.55% | 758,321 | 0.64% |
| 3. Expected employee contributions | -16,322,892 | -11.83% | -11,221,454 | -9.41% |
| 4. Employer normal cost: (1) + (2) + (3) | 15,668,044 | 11.36% | 10,926,472 | 9.16% |
| 5. Actuarial accrued liability | 1,844,886,028 | | 1,872,160,083 | |
| 6. Actuarial value of assets | 1,480,152,515 | | 1,412,951,452 | |
| 7. Unfunded/(overfunded) actuarial accrued liability: (5) - (6) | 364,733,513 | | 459,208,631 | |
| 8. Payment on projected unfunded actuarial accrued liability | 28,599,634 | 20.73% | 34,588,516 | 29.00% |
| 9. Adjustment for timing[1] | 2,896,889 | 2.10% | 2,978,514 | 2.50% |
| **10. Actuarially determined contribution: (4) + (8) + (9)** | **$47,164,567** | **34.19%** | **$48,493,502** | **40.66%** |
| 11. Projected payroll | 137,951,112 | | 119,278,611 | |

The funding policy adopted by the City is designed to reduce the volatility of the ADC by using an actuarial value of assets which smooths investment gains and losses over five years. If the actuarially determined contribution were determined using the market value of assets, the actuarially determined contribution for the fiscal year ending June 30, 2026 would decrease to $46,987,415.

Based on the current funding policy, the actuarially determined contribution is expected to remain level as a percent of payroll and the funded ratio is expected to increase until it reaches 100% in 17 years.

[1] Actuarial contributions are assumed to be payable at the middle of every year. Calculated as {[(4) + (8)] x [1.07 ^ 0.50] x 1.03} – (4) – (8).

# Section 2: Actuarial Valuation Results

Therefore, the unfunded actuarial accrued liability is expected to be fully amortized by June 30, 2042, assuming all assumptions are realized and contributions are made in accordance with the funding policy.

The current funding policy is intended to result in predictable employer contributions that eliminate the unfunded actuarial accrued liability within 17 years, thereby providing benefit security to plan participants while balancing the needs of current and future contributors to the plan.

The actuarially determined contribution under the funding policy is a “Reasonable Actuarially Determined Contribution” as required under Actuarial Standard of Practice No. 4 *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*.

# Reconciliation of actuarially determined contribution

## Reconciliation from July 1, 2024 to July 1, 2025

| Component | Amount | Percent of Projected Payroll |
|---|---|---|
| Actuarially determined contribution for fiscal year ending June 30, 2025 | $48,493,502 | 40.66% |
| **Changes in Actuarially Determined Contribution due to:** | | |
| • Change in actuarial firm | -$10,248,519 | -8.59% |
| • Plan changes | 6,587,156 | 5.51% |
| • Other gains and losses on accrued liability | 1,409,237 | 1.18% |
| • Expected change in amortization payment due to payroll growth | 1,105,559 | 0.93% |
| • Investment gain | -220,374 | -0.18% |
| • Other changes, including composition and number of participants | 38,006 | 0.03% |
| • **Total change** | **-$1,328,935** | **-1.12%** |
| Total change in percentage due to payroll change | | -5.35% |
| **Actuarially determined contribution for fiscal year ending June 30, 2026** | **$47,164,567** | **34.19%** |

## History of funded ratios

| Actuarial Valuation Date of July 1 | Actuarial Value of Assets (AVA) (a) | Market Value of Assets (MVA) (b) | Actuarial Accrued Liability (AAL) (c) | Funded Ratio using AVA (a) / (c) | Funded Ratio using MVA (b) / (c) |
|---|---|---|---|---|---|
| 2015 | $983,385,000 | $983,385,000 | $1,247,457,987 | 78.83% | 78.83% |
| 2016 | 950,415,000 | 950,415,000 | 1,300,184,303 | 73.10% | 73.10% |
| 2017 | 1,051,671,000 | 1,051,671,000 | 1,365,388,871 | 77.02% | 77.02% |
| 2018 | 1,130,389,000 | 1,130,389,000 | 1,297,470,523 | 87.12% | 87.12% |
| 2019 | 1,163,143,000 | 1,163,143,000 | 1,498,485,371 | 77.62% | 77.62% |
| 2020 | 1,194,588,537 | 1,150,481,000 | 1,546,121,100 | 77.26% | 74.41% |
| 2021 | 1,293,422,842 | 1,501,624,000 | 1,680,751,189 | 76.96% | 89.34% |
| 2022 | 1,360,372,993 | 1,275,268,000 | 1,778,012,002 | 76.51% | 71.72% |
| 2023 | 1,412,951,452 | 1,366,224,000 | 1,872,160,083 | 75.47% | 72.98% |
| 2024 | 1,480,152,515 | 1,482,273,000 | 1,844,886,028 | 80.23% | 80.34% |

# History of employer contributions

## Actuarially Determined Contribution (ADC) versus Actual Contribution

| Year Ended June 30 | ADC Amount | Actual Contribution Amount | Percent Contributed |
|---|---|---|---|
| 2017 | $27,492,851 | $27,493,000 | 100.00% |
| 2018 | 34,176,199 | 34,176,000 | 100.00% |
| 2019 | 31,231,530 | 31,232,000 | 100.00% |
| 2020 | 21,571,036 | 21,571,000 | 100.00% |
| 2021 | 35,708,504 | 35,709,000 | 100.00% |
| 2022 | 41,499,918 | 41,500,000 | 100.00% |
| 2023 | 40,973,887 | 40,974,000 | 100.00% |
| 2024 | 44,299,149 | 44,299,000 | 100.00% |
| 2025 | 48,493,502 | - - | - - |
| 2026 | 47,164,567 | - - | - - |

## Low-Default-Risk Obligation Measure (LDROM)

Actuarial Standard of Practice No. 4 (ASOP 4) *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*. requires the disclosure of a Low-Default-Risk Obligation Measure (LDROM) when performing a funding valuation. The LDROM presented in this report is calculated using the same methodology and assumptions used to determine the Actuarial Accrued Liability (AAL) used for funding, except for the discount rate. The LDROM is required to be calculated using "a discount rate…derived from low-default-risk fixed income securities whose cash flows are reasonably consistent with the pattern of benefits expected to be paid in the future."

The LDROM is a calculation assuming a plan's assets are invested in an all-bond portfolio, generally lowering expected long-term investment returns. The discount rate selected and used for this purpose is the Bond Buyer General Obligation 20-year Municipal Bond Index Rate, published at the end of each week. The last published rate in June of the measurement period, by The Bond Buyer (www.bondbuyer.com), is 3.93% for use effective June 30, 2024. This is the rate used to determine the discount rate for valuing reported public pension plan liabilities in accordance with Governmental Accounting Standards when plan assets are projected to be insufficient to make projected benefit payments, and the 20-year period reasonably approximates the duration of plan liabilities. The LDROM is not used to determine a plan's funded status or Actuarially Determined Contribution. The plan's expected return on assets, currently 7.00%, is used for these calculations.

As of June 30, 2024, the LDROM for the system is $2,820,430,782. The difference between the plan's AAL of $1,844,886,028 and the LDROM can be thought of as the increase in the AAL if the entire portfolio were invested in low-default-risk securities. Alternatively, this difference could also be viewed as representing the expected savings from investing in the plan's diversified portfolio compared to investing only in low-default-risk securities.

ASOP 4 requires commentary to help the intended user understand the significance of the LDROM with respect to the funded status of the plan, plan contributions, and the security of participant benefits. In general, if plan assets were invested exclusively in low-default-risk securities, the funded status would be lower and the Actuarially Determined Contribution would be higher. While investing in a portfolio with low-default-risk securities may be more likely to reduce investment volatility and the volatility of employer contributions, it also may be more likely to result in higher employer contributions or lower benefits.

## Risk

The actuarial valuation results are dependent on a single set of assumptions; however, there is a risk that emerging results may differ significantly as actual experience proves to be different from the current assumptions.

We have not been engaged to perform a detailed analysis of the potential range of the impact of risk relative to the Fund's future financial condition but have included a brief discussion of some risks that may affect the Fund.

- Economic and Other Related Risks. Potential implications for the Fund due to the following economic effects (that were not reflected as of the valuation date) include:
  - Volatile financial markets and investment returns lower than assumed
  - High inflationary environment impacting salary increases and COLAs
- Investment Risk (the risk that returns will be different than expected)

  If the actual return on market value for the prior plan year were 1% different (either higher or lower), the unfunded actuarial liability would change by 3.70%, or about $13,496,330, disregarding the asset smoothing method.

  Since the Fund's assets are much larger than contributions, investment performance may create volatility in the actuarially determined contribution requirements.
- Longevity Risk (the risk that mortality experience will be different than expected)

  The actuarial valuation includes an expectation of future improvement in life expectancy. Emerging plan experience that does not match these expectations will result in either an increase or decrease in the actuarially determined contribution.
- Contribution Risk (the risk that actual contributions will be different from actuarially determined contribution)

  The City's funding policy requires payment of the actuarially determined contribution. As long as this policy is adhered to, contribution risk is negligible.
- Demographic Risk (the risk that participant experience will be different than assumed)

  Examples of this risk include:
  - Actual retirements occurring earlier or later than assumed. The value of retirement plan benefits is sensitive to the rate of benefit accruals and any early retirement subsidies that apply.
  - More or less active participant turnover than assumed.

# Section 2: Actuarial Valuation Results

- There are external factors including legislative or financial reporting changes that could impact the Fund's funding and disclosure requirements. While we do not assume any changes in such external factors, it is important to understand that they could have significant consequences for the Fund.
- Actual Experience Over the Last Ten Years
  - The funded percentage on the actuarial value of assets has ranged from a low of 73.10% in 2016 to a high of 87.12% in 2018.
  - The funded percentage on the market value of assets has ranged from a low of 71.72% in 2022 to a high of 87.12% in 2018.

Maturity Measures

- As pension plans mature, the cash needed to fulfill benefit obligations will increase over time. Therefore, cash flow projections and analysis should be performed to assure that the Fund's asset allocation is aligned to meet emerging pension liabilities.
- Currently the Fund has a non-active to active participant ratio of 1.17, which has primarily increased over the last ten years.

  For the prior year, benefits paid and administrative expenses were $33,183,000 more than contributions received. Plans with high levels of negative cash flows may have a need for a larger allocation to income generating assets.

Detailed Risk Assessment

- A more detailed assessment of the risks would provide the Board with a better understanding of the risks inherent in the Fund. This assessment may include scenario testing, sensitivity testing, stress testing, and stochastic modeling.
- A detailed risk assessment could be important for the Fund because:
  - Relatively small changes in investment performance can produce large swings in the unfunded liabilities.
  - The Plan's asset allocation has potential for a significant amount of investment return volatility.
  - Retirees and beneficiaries in pay status account for 66% of the Fund's liabilities, leaving fewer options for reducing plan costs in the event of adverse experience.
  - Recent changes in the plan of benefits may result in participant choices that vary from those assumed.
  - The Board has not had a detailed risk assessment in recent years.

## GFOA funded liability by type

The Actuarial Accrued Liability represents the present value of benefits earned, calculated using the Fund's actuarial cost method. The Actuarial Value of Assets reflects the financial resources available to liquidate the liability. The portion of the liability covered by assets reflects the extent to which accumulated plan assets are sufficient to pay future benefits, and is shown for liabilities associated with employee contributions, pensioner liabilities, and other liabilities. The Government Finance Officers Association (GFOA) recommends that the funding policy aim to achieve a funded ratio of 100 percent.

### GFOA Funded Liability by Type as of June 30

| Type | 2024 | 2023 |
|---|---|---|
| **Actuarial accrued liability (AAL)** | | |
| Active member contributions | $134,912,996 | $129,178,428 |
| Retirees and beneficiaries | 1,221,644,661 | 1,225,957,896 |
| Active and inactive members (employer-financed) | 488,328,371 | 517,023,759 |
| **Total** | **$1,844,886,028** | **$1,872,160,083** |
| Actuarial value of assets | 1,480,152,515 | 1,412,951,452 |
| **Cumulative portion of AAL covered** | | |
| **Active member contributions** | **100.00%** | **100.00%** |
| **Retirees and beneficiaries** | **100.00%** | **100.00%** |
| **Active and inactive members (employer-financed)** | **25.31%** | **11.18%** |

## Actuarial balance sheet

An overview of the Fund's funding is given by an Actuarial Balance Sheet. In this approach, first the amount and timing of all future payments that will be made by the Fund for current participants is determined. Then these payments are discounted at the valuation interest rate to the date of the valuation, thereby determining the present value, referred to as the "liability" of the Fund.

Second, this liability is compared to the assets. The "assets" for this purpose include the net amount of assets already accumulated by the Fund, the present value of future member contributions, the present value of future employer normal cost contributions, and the present value of future employer amortization payments for the unfunded actuarial accrued liability.

### Actuarial Balance Sheet

| Description | Year Ended June 30, 2024 | Year Ended June 30, 2023 |
|---|---|---|
| **Liabilities** | | |
| Present value of benefits for retired participants and beneficiaries | $1,221,644,661 | $1,225,957,896 |
| Present value of benefits for inactive vested participants | 10,572,448 | 8,581,522 |
| Present value of benefits for active participants | 862,092,429 | 784,814,609 |
| **Total liabilities** | **$2,094,309,538** | **$2,019,354,027** |
| **Current and future assets** | | |
| Total valuation value of assets | $1,480,152,515 | $1,412,951,452 |
| Present value of future contributions by members | 149,613,067 | 99,873,873 |
| Present value of future employer contributions for: | | |
| • Entry age cost | 99,810,443 | 47,320,071 |
| • Unfunded actuarial accrued liability | 364,733,513 | 459,208,631 |
| **Total of current and future assets** | **$2,094,309,538** | **$2,019,354,027** |

# Actuarial Present Value of Accumulated Plan Benefits

The actuarial present value of accumulated plan benefits is shown below as of July 1, 2024 and as of July 1, 2023.

## Actuarial Present Value of Accumulated Plan Benefits

| Description | Year Ended June 30, 2024 | Year Ended June 30, 2023 |
|---|---|---|
| **Actuarial present value of vested accumulated plan benefits:** | | |
| Participants currently receiving payments | $1,221,644,661 | $1,225,957,896 |
| Other vested benefits[1] | 445,107,126 | 490,820,701 |
| **Total vested benefits (PVVB)** | **$1,666,751,787** | **$1,716,778,597** |
| Actuarial present value of non-vested accumulated plan benefits | 33,835,862 | 16,583,629 |
| **Total actuarial present value of accumulated plan benefits (PVAB)** | **$1,700,587,649** | **$1,733,362,226** |
| **Actuarial value of Assets (AVA)** | $1,480,152,515 | $1,412,951,452 |
| **Market value of Assets (MVA)** | $1,482,273,000 | $1,366,244,000 |
| **Funded Ratios (PVVB):** | | |
| • AVA as a percentage of present value of vested accumulated benefits | 88.80% | 82.30% |
| • MVA as a percentage of present value of vested accumulated benefits | 88.93% | 79.58% |
| **Funded Ratios (PVAB):** | | |
| • AVA as a percentage of present value of accumulated benefits | 87.04% | 81.52% |
| • MVA as a percentage of present value of accumulated benefits | 87.16% | 78.82% |

[1] Other vested benefits include employee contributions amounts which are considered 100% vested.

# Section 2: Actuarial Valuation Results

The factors that affected the change in the actuarial present value of accumulated plan benefits from the preceding to the current benefit information date are as follows:

| Factors | Change in Actuarial Present Value of Accumulated Plan Benefits |
|---|---|
| Benefits accumulated, net experience gain or loss, changes in data | -$70,380,642 |
| Plan changes | 9,477,634 |
| Benefits paid | -90,055,000 |
| Interest | 118,183,431 |
| **Total** | **-$32,774,577** |

## State minimum requirements

Under Georgia minimum funding requirements, the liability may be amortized as a percent of payroll, rather than a fixed dollar amount. In general, with fixed dollar amortization, actual experience close to the assumptions will result in a total contribution requirement (the normal cost plus the payment on the unfunded actuarial liability) that decreases over time as a percentage of payroll. With percentage of payroll amortization, given expected experience, the total contribution requirement should remain level as a percentage of payroll.

Effective with the July 1, 2011 valuation, the amortization period was changed to a closed 30-year period, with 17 years remaining as of July 1, 2024. The contributions determined under this method meet the Georgia minimum funding requirements by virtue of Georgia Code Section 47-20-10(b).

# Section 3: Supplemental Information

## Exhibit A: Table of plan demographics

| Demographic Data | Year Ended June 30, 2024 | Year Ended June 30, 2023 | Change From Prior Year |
|---|---|---|---|
| **Active participants in valuation:** | | | |
| • Number | 1,591 | 1,554 | 2.4% |
| • Average age | 39.6 | 39.8 | -0.2 |
| • Average years of service | 11.2 | 10.9 | 0.3 |
| • Total covered payroll for upcoming year | $133,933,118 | $115,804,477 | 15.7% |
| • Average covered payroll for upcoming year | 84,182 | 74,520 | 13.0% |
| • Projected payroll for year following upcoming year | 137,951,112 | 119,278,611 | 15.7% |
| • Account balances | 134,912,996 | 129,178,428 | 4.4% |
| • Number partially vested | 296 | 455 | -34.9% |
| • Number fully vested | 811 | 650 | 24.8% |
| **Inactive participants:** | | | |
| • Inactive vested participants | 79 | 87 | -9.2% |
| • Inactive participants due a refund | 451 | 421 | 7.1% |
| **Retired participants:** | | | |
| • Number in pay status | 1,454 | 1,434 | 1.4% |
| • Average age | 65.4 | 65.1 | 0.3 |
| • Average monthly benefit | $4,520 | $4,396 | 2.8% |
| **Disabled participants:** | | | |
| • Number in pay status | 72 | 67 | 7.5% |
| • Average age | 67.2 | 67.0 | 0.2 |
| • Average monthly benefit | $3,639 | $3,578 | 1.7% |

# Section 3: Supplemental Information

| Demographic Data | Year Ended June 30, 2024 | Year Ended June 30, 2023 | Change From Prior Year |
|---|---|---|---|
| **Beneficiaries:** | | | |
| • Number in pay status | 260 | 257 | 1.2% |
| • Average age | 74.8 | 74.2 | 0.6 |
| • Average monthly benefit | $2,740 | $2,649 | 3.4% |

# Exhibit B: Participants in active service and average compensation[1] as of June 30, 2024 by age and years of service

| | Years of Service | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Age** | **Total** | **0 - 4** | **5 - 9** | **10 -14** | **15 - 19** | **20 - 24** | **25 - 29** | **30 & over** |
| Under 25 | 66 | 66 | — | — | — | — | — | — |
| | $61,518 | $61,518 | — | — | — | — | — | — |
| 25 - 29 | 194 | 161 | 32 | 1 | — | — | — | — |
| | $64,836 | $63,050 | $72,572 | $104,936 | — | — | — | — |
| 30 - 34 | 303 | 134 | 128 | 41 | — | — | — | — |
| | $73,667 | $62,923 | $78,620 | $93,317 | — | — | — | — |
| 35 - 39 | 286 | 71 | 67 | 121 | 27 | — | — | — |
| | $84,685 | $64,247 | $79,058 | $96,210 | $100,745 | — | — | — |
| 40 - 44 | 260 | 32 | 39 | 63 | 94 | 32 | — | — |
| | $91,797 | $65,396 | $78,032 | $91,945 | $102,058 | $104,538 | — | — |
| 45 - 49 | 223 | 11 | 15 | 21 | 80 | 79 | 17 | — |
| | $98,277 | $63,586 | $76,544 | $94,500 | $98,029 | $108,203 | $99,604 | — |
| 50 - 54 | 197 | 3 | 12 | 24 | 44 | 42 | 70 | 2 |
| | $97,835 | $62,365 | $72,819 | $91,347 | $94,849 | $101,123 | $106,215 | $82,381 |
| 55 - 59 | 48 | 5 | 1 | 11 | 14 | 8 | 6 | 3 |
| | $92,202 | $48,396 | $68,486 | $87,082 | $95,396 | $95,940 | $103,134 | $145,152 |
| 60 & over | 14 | 1 | 2 | 3 | 4 | 4 | — | — |
| | $90,834 | $60,641 | $75,002 | $94,377 | $95,655 | $98,821 | — | — |
| **Total** | **1,591** | **484** | **296** | **285** | **263** | **165** | **93** | **5** |
| | **$84,182** | **$62,988** | **$77,589** | **$93,974** | **$99,039** | **$104,868** | **$104,808** | **$120,043** |

[1] Compensation is the greater of base pay and annualized pay for those hired during the prior plan year along with those whose service from the prior year increased by less than one year.

# Exhibit C: Reconciliation of participant data

| Description | Active Participants | Inactive Vested Participants[1] | Disableds | Retired Participants | Beneficiaries | Total |
|---|---|---|---|---|---|---|
| **Number as of July 1, 2023** | **1,554** | **87** | **67** | **1,434** | **257** | **3,399** |
| New participants[2] | 152 | N/A | N/A | N/A | N/A | 152 |
| Terminations — with vested rights | -8 | 8 | 0 | 0 | 0 | 0 |
| Terminations — without vested rights | -24 | N/A | N/A | N/A | N/A | -24 |
| Retirements | -52 | -3 | N/A | 55 | N/A | 0 |
| New disabilities | 0 | 0 | 0 | N/A | N/A | 0 |
| Return to work | 1 | -1 | 0 | 0 | N/A | 0 |
| Deceased | -3 | -2 | -2 | -27 | -13 | -47 |
| New beneficiaries | 0 | 0 | 0 | 0 | 17 | 17 |
| Lump sum cash-outs | -26 | -10 | 0 | 0 | 0 | -36 |
| Certain period expired | N/A | N/A | 0 | 0 | -1 | -1 |
| Data adjustments[3] | -3 | 0 | 7 | -8 | 0 | -4 |
| **Number as of July 1, 2024** | **1,591** | **79** | **72** | **1,454** | **260** | **3,456** |

[1] Excludes terminated participants due a refund of their employee contributions.
[2] Five of the 152 new actives are rehired police officers; one of the remaining 147 new participants included in the data for the first time this year has over one year of service.
[3] The following data adjustments were made per the TPA:
Three duplicate active participants were excluded;
Eight disabled retirees previously classified as healthy annuitants at their normal retirement date were reclassified as disabled annuitants;
One disabled annuitant classified as in payment status by the prior actuary was considered not in payment status by the TPA.

# Exhibit D: Summary statement of income and expenses on a market value basis

## Income and Expenses for Years Ended June 30

| Item | 2024 | 2023 |
|---|---|---|
| **Contribution and other income:** | | |
| • Employer contributions | $44,299,000 | $40,974,000 |
| • Employee contributions | 13,414,000 | 13,644,000 |
| • Other income | 1,000 | 177,000 |
| • Less administrative expenses | -841,000 | -859,000 |
| – **Net contribution and other income** | **$56,873,000** | **$53,936,000** |
| **Investment income:** | | |
| • Investment income | $151,817,000 | $123,502,000 |
| • Less investment fees | -2,586,000 | -2,128,000 |
| – **Net investment income** | **$149,231,000** | **$121,374,000** |
| • **Total income available for benefits** | **$206,104,000** | **$175,310,000** |
| **Less benefit payments:** | | |
| – **Net benefit payments** | **-$90,055,000** | **-$84,354,000** |
| **Change in market value of assets** | **$116,049,000** | **$90,956,000** |
| **Net assets at market value at the beginning of the year** | **$1,366,224,000** | **$1,275,268,000** |
| **Net assets at market value at the end of the year** | **$1,482,273,000** | **$1,366,224,000** |

## Exhibit E: Development of the fund through June 30, 2024

| Year Ended June 30 | Employer Contributions | Employee Contributions | Other Income | Net Investment Return[1] | Admin. Expenses | Benefit Payments | Market Value of Assets at Year-End | Actuarial Value of Assets at Year-End | Actuarial Value as a Percent of Market Value |
|---|---|---|---|---|---|---|---|---|---|
| 2015 | $32,693,000 | $11,224,000 | $4,000 | $8,734,000 | $524,000 | $56,253,000 | $983,385,000 | $983,385,000 | 100.0% |
| 2016 | 25,441,000 | 11,825,000 | 193,000 | -10,177,000 | 429,000 | 59,823,000 | 950,415,000 | 950,415,000 | 100.0% |
| 2017 | 27,493,000 | 10,830,000 | 0 | 125,938,000 | 521,000 | 62,484,000 | 1,051,671,000 | 1,051,671,000 | 100.0% |
| 2018 | 34,176,000 | 10,555,000 | 76,000 | 100,532,000 | 836,000 | 65,785,000 | 1,130,389,000 | 1,130,389,000 | 100.0% |
| 2019 | 31,232,000 | 11,273,000 | 0 | 60,466,000 | 568,000 | 69,649,000 | 1,163,143,000 | 1,163,143,000 | 100.0% |
| 2020 | 21,571,000 | 12,141,000 | 40,000 | 27,714,000 | 815,000 | 73,313,000 | 1,150,481,000 | 1,194,588,537 | 103.8% |
| 2021 | 35,709,000 | 12,354,000 | 4,000 | 381,101,000 | 1,382,000 | 76,643,000 | 1,501,624,000 | 1,293,422,842 | 86.1% |
| 2022 | 41,500,000 | 12,969,000 | 3,000 | -200,785,000 | 946,000 | 79,097,000 | 1,275,268,000 | 1,360,372,993 | 106.7% |
| 2023 | 40,974,000 | 13,644,000 | 177,000 | 121,374,000 | 859,000 | 84,354,000 | 1,366,224,000 | 1,412,951,452 | 103.4% |
| 2024 | 44,299,000 | 13,414,000 | 1,000 | 149,231,000 | 841,000 | 90,055,000 | 1,482,273,000 | 1,480,152,515 | 99.9% |

[1] On a market basis, net of investment fees

# Section 4: Actuarial Valuation Basis

## Exhibit 1: Actuarial assumptions, methods and models

### Rationale for assumptions

The information and analysis used in selecting methods and each economic and mortality assumption that has a significant effect on this actuarial valuation is shown in in the Review of Actuarial Experience for the five-year period ended June 30, 2019 dated March 17, 2021. The information used in selecting each other demographic assumption that has a significant effect on this valuation is shown in the Review of Actuarial Experience for the five-year period ended June 30, 2019 dated April 20, 2022. For participants hired after August 31, 2011, the vacation pay and cost-of-living adjustments were updated with this January 1, 2024 valuation to reflect updated plan provisions included in Ordinance 24-O-1377, adopted on July 2, 2024. Current data is reviewed in conjunction with each annual valuation.

### Net investment return

7.00%.The net investment return assumption is a long-term estimate derived from historical data, current and recent market expectations, and professional judgment. As part of the analysis, a building block approach was used that reflects inflation expectations and anticipated risk premiums for each of the portfolio's asset classes as provided by Marquette and Segal Marco Advisors, as well as the Fund's target asset allocation.

### Administrative expenses

$700,000 per year beginning in 2020, projected annually with 2.25% inflation. As of July 1, 2024, the assumed annual expense is $765,158.

## Salary increases

| Age | Rate (%) |
|---|---|
| Under 25 | 10.00 |
| 25 - 29 | 8.00 |
| 30 - 34 | 6.00 |
| 35 - 39 | 5.00 |
| 40 - 44 | 4.50 |
| 45 - 49 | 4.00 |
| 50 - 54 | 3.50 |
| 55 - 59 | 3.25 |
| 60 and over | 3.00 |

Salary increases include an assumed inflation rate of 2.25% and 0.75% productivity growth.

## Vacation pay (annual leave) adjustment

Hired prior to September 1, 2011: Retirement benefits are increased by 7.50% to reflect vacation pay.

Hired after August 31, 2011: Retirement benefits are increased by 4.75% to reflect vacation pay.

## Sick Leave Pay Adjustment

Hired prior to September 1, 2011: Retirement benefits are increased by 3.00%.

Hired after August 31, 2011: No adjustment

## Payroll growth

3.00%, used to amortize the unfunded actuarial accrued liability as a level percentage of payroll

## Cost-of-living adjustments

| | |
|---|---|
| Hired prior to September 1, 2011: | 2.25%, compounded annually after retirement |
| Hired after August 31, 2011 and employed or reemployed on or after January 1, 2025: | 2.00%, compounded annually after retirement |
| Hired after August 31, 2011 and no longer employed on January 1, 2025: | 1.00%, compounded annually after retirement |

## Mortality rates

**Pre-Retirement:** Sex-distinct Pub-2010 Public Safety Employee Amount-weighted Mortality Table, projected generationally with scale MP-2020

**Healthy Annuitants and Beneficiaries of Living Retirees**: Sex-distinct Pub-2010 Public Safety Healthy Retiree Amount-weighted Mortality Table, projected generationally with scale MP-2020

**Disabled Annuitants:** Sex-distinct Pub-2010 Public Safety Disabled Retiree Amount-weighted Mortality Table, projected generationally with scale MP-2020

**Contingent survivors:** Sex-distinct Pub-2010 Public Safety Contingent Survivor Amount-weighted Mortality Table, projected generationally with scale MP-2020

The underlying tables with projection to the measurement date reasonably reflect the mortality experience of the Fund as of the measurement date. These mortality tables were then adjusted to future years using the generational projection to reflect future mortality improvement between the measurement date and those years.

## Disability rates before retirement

25% of the sex-distinct rates from Class 4 of the Wyatt 1985 Disability Study. Rates are as follows:

Rate (%)

| Age | Disability[1] Male | Disability[1] Female |
|---|---|---|
| 20 | 0.04 | 0.03 |
| 25 | 0.06 | 0.04 |
| 30 | 0.09 | 0.07 |
| 35 | 0.13 | 0.11 |
| 40 | 0.17 | 0.16 |
| 45 | 0.24 | 0.22 |
| 50 | 0.34 | 0.33 |
| 55 | 0.57 | 0.53 |
| 60 | 0.86 | 0.62 |

## Withdrawal rates before retirement (amount-weighted)

| Age | Rate (%)[2] |
|---|---|
| 20 - 23 | 12.00 |
| 24 | 7.00 |
| 25 - 32 | 4.50 |
| 33 - 39 | 3.00 |
| 40 - 57 | 2.00 |
| 58 and over | 1.00 |

[1] 100% of disabilities are considered to be non-job-related.
[2] Withdrawal rates do not apply after a participant becomes eligible for early retirement.

## Retirement rates for less than 30 years of service at retirement

| Age | Rate (%) |
|---|---|
| Under 50 | 2 |
| 50 | 3 |
| 51 | 4 |
| 52 | 6 |
| 53 | 15 |
| 54 | 30 |
| 55 | 50 |
| 56 | 30 |
| 57 - 60 | 15 |
| 61 | 25 |
| 62 | 75 |
| 63 and over | 100 |

## Retirement rates for 30 or more years of service at retirement

100%

## Weighted average retirement age

Age 54.1, determined as follows: The weighted average retirement age for each participant is calculated as the sum of the product of each potential current or future retirement age times the probability of surviving from current age to that age and then retiring at that age, assuming no other decrements. The overall weighted retirement age is the average of the individual retirement ages based on all the active participants included in the July 1, 2024 actuarial valuation.

## Retirement age for future inactive vested participants

Hired before September 1, 2011: Age 55, or current age if later

Hired after August 31, 2011: Age 57, or current age if later

## Retirement age for current inactive vested participants

Age 60, or current age if later

## Salary data for participants

For participants with less than one year of service OR for participants whose service from the prior year increased by less than one year, salaries were based on the greater of base pay and annualized salary, with both amounts provided by the plan administrator. For all other participants, salaries were based on base pay.

## Additional accumulated unused sick leave at retirement

| | |
|---|---|
| Hired prior to September 1, 2011: | Additional 0.50 years of service included in total service (prior to application of 80% maximum) |
| Hired after August 31, 2011: | Additional 0.50 years of service included in total service (prior to application of 70% maximum) |

## Percent married

| | |
|---|---|
| Hired prior to September 1, 2011: | Assumption based on active participant contribution rate provided with valuation data (if 12% assume single, if 13% assume married); if contribution rate not available for terminated vested participants, 75% |
| Hired after August 31, 2011: | Assume all participants are not married |

## Form of payment

| | |
|---|---|
| Married Participants Hired prior to September 1, 2011: | 75% joint and survivor annuity |
| Unmarried Participants Hired prior to September 1, 2011: | Life annuity |
| All Participants Hired after August 31, 2011: | Life annuity |

## Percent married for pre-retirement death benefits

75%

## Age of spouse

Spouses of male participants are female and two years younger and spouses of female participants are male and one year older.

## Refunds of employee contributions for terminated vested participants

95% of participants elect a refund of their employee contribution balances.

## Actuarial value of assets

Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the actuarial value, and is recognized over a five-year period, further adjusted, if necessary, to be within 20% of the market value.

## Actuarial cost method

Entry Age Actuarial Cost Method. Entry Age is current age minus years of service. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by salary, with Normal Cost determined as if the current plan of benefits had always been in effect using the plan of benefits applicable to each participant.

## Models

Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

## Justification for change in actuarial assumptions

A new assumption was introduced to adjust salary to use the greater of base salary and annualized salary for participants with less than one year of service as well as participants whose service increased by less than one year from the prior year.

In conjunction with Ordinance 24-O-1377, adopted on July 2, 2024, the following assumptions for participants hired after August 31, 2011 were changed:

- The vacation pay adjustment was changed from increasing the retirement benefit by 2.25% to increasing it by 4.75%. This change was made to reflect the decrease in the average pay period from 120 months to 60 months.
- An additional 0.50 years of service is being added to total service prior to the application of the 70% maximum to reflect that unused sick leave is now being included in benefit service.
- The annual cost-of-living increase assumption was increased from 1% to 2%. This change was made to reflect the increase in the COLA cap from 1% to 2%.

There have been no other changes in actuarial assumptions since the last valuation.

# Exhibit 2: Summary of plan provisions

This exhibit summarizes the major provisions of the Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

## Plan year

July 1 through June 30

## Plan status

Ongoing

## Normal pension

| | |
|---|---|
| **Eligibility:** | A participant may retire at |
| Hired before September 1, 2011*: | (a) age 55 after completing 10 years of service, *or* |
| | (b) age 65 after completing 5 years of service, *or* |
| | (c) age 55 after completing 5 years of service (vesting percentage applies) |
| Hired after August 31, 2011: | (a) age 57 after completing 10 years of service, *or* |
| | (b) age 57 after completing 5 years of service (vested percentage applies) |

For all participants, eligibility service includes unused sick leave but does not include unused annual leave.

*****Participants hired between July 1, 2010 and August 31, 2011 who were actively employed on January 1, 2025 became eligible to elect to be covered under the same provisions as those hired prior to July 1, 2010. All participants in this plan elected to be covered under the provisions for those hired prior to July 1, 2010.

**Monthly Amount**

| | |
|---|---|
| Hired before September 1, 2011: | 3.0% of Average Monthly Salary for each year of service, capped at 80% of Average Monthly Salary |
| Hired after August 31, 2011: | (a) 1.0% times service as of December 31, 2024<br>*plus*<br>(b) 1.6% times [(service from hire up to 10 years) less (service as of December 31, 2024, not in excess of 10 years)]<br>*plus*<br>(c) 2.0% times [(service from hire in excess of 10 years not to exceed 10 years) less (service as of December 31, 2024 in excess of 10 years)]<br>*plus*<br>(d) 2.4% times service from hire in excess of 20 years with sum of (a), (b), (c) and (d) multiplied by Average Monthly Salary, with final benefit capped at 70% of Average Monthly Salary<br>Participants hired before September 1, 2011 had a one-time option to elect to have benefits earned for service after October 31, 2011 use the same accrual rate, average monthly salary, and COLA as participants hired after August 31, 2011. If a participant terminates after December 31, 2024, the accrual rate, average monthly salary and COLA are based on the provisions for participants hired after August 31, 2011 who are still employed on January 1, 2025. Benefits for service earned prior to November 1, 2011 follow the plan provisions in their predecessor plan. The participants who made this election are referred to as Hybrid Participants. Normal retirement eligibility is based on their predecessor plan.<br>For all participants, service used to calculate the benefit amount includes unused sick leave but does not include unused annual leave. |

**Average Monthly Salary:**

| | |
|---|---|
| Hired before September 1, 2011: | Average of the highest consecutive 36 months of salary. Unused sick leave and unused annual leave are included. |
| Hired after August 31, 2011: | Average of the highest consecutive 60 months of salary. Unused annual leave is included. Unused sick leave is excluded. |

**Form of Payment:**

| | |
|---|---|
| Hired prior to September 1, 2011: | 75% Joint and Survivor (no reduction in benefit for providing survivor coverage) if paying 13% employee contribution rate; single life annuity if paying 12% employee contribution rate |
| Hired after August 31, 2011: | Single life annuity; 75% Joint and Survivor available with reduction |

## Unreduced 30-year pension

| | |
|---|---|
| **Eligibility Requirement:** | Any age with 30 years of service. Service excludes both unused sick leave and unused annual leave. |
| **Monthly Amount:** | Normal pension monthly amount |

## Early retirement

**Eligibility Requirement**

| | |
|---|---|
| Hired before September 1, 2011: | 10 years of service |
| Hired after August 31, 2011: | Age 47 and 10 years of service<br>Service for all participants includes unused sick leave but does not include unused annual leave.<br>For Hybrid Participants, early retirement eligibility under their predecessor plan applies to their entire benefit. |

**Monthly Amount**

| | |
|---|---|
| Hired before September 1, 2011: | Normal pension monthly amount reduced by ½ of 1% per month for the first 60 months and by ¼ of 1% per month for the remaining months by which age at retirement is less than age 55. |
| Hired after August 31, 2011: | Normal pension monthly amount reduced by ½ of 1% per month by which age at retirement is less than age 57. |

For Hybrid Participants, early retirement reductions under their predecessor plan apply to their entire benefit.

## Disability

| | |
|---|---|
| **Service Requirement:** | 5 years of service for non-job-related disability. None for job related disability. |
| **Monthly Amount Payable until Normal Retirement** | |
| Hired before September 1, 2011: | Greater of 50% of highest consecutive 36 months of salary at disability *and* benefit calculated as 3.00% times service accrued times average of the highest consecutive 36 months of salary at disability; benefit payable immediately |
| Hired after August 31, 2011: | Greatest of 50% of highest consecutive 36 months of salary at disability *and* benefit calculated as 2.00% times service accrued times average of the highest consecutive 36 months of salary at disability *and* monthly accrued benefit as of date of disability; benefit payable immediately |
| **Recalculated Monthly Amount Payable at Normal Retirement for Surviving Disabled Participants** | |
| Hired before September 1, 2011: | 3.00% times service (accrued at disability plus imputed through Normal Retirement) times average of the highest consecutive 36 months of salary at date of disability times vested percentage (determined based on service at disability plus imputed service); benefit payable at age 55. Benefit amount cannot exceed 80% of Average Monthly Salary. |
| Hired after August 31, 2011: | Benefit calculated under Normal Pension using service at disability plus service imputed through age 57 times average of the highest consecutive 60 months of salary at date of disability times vested percentage (determined based on service at disability plus imputed service); benefit payable at age 57. Benefit amount cannot exceed 70% of Average Monthly Salary. |
| All participants | Benefit amount at Normal Retirement can be less than what participant was receiving during period of disability. |

## Vesting

An employee who terminates employment may receive a percentage of the accrued benefit payable at normal retirement as determined below:

| Completed Years of Service | Vesting Percentage |
|---|---|
| Less than 5 | 0% |
| 5 | 25 |
| 6 | 30 |
| 7 | 35 |
| 8 | 40 |
| 9 | 45 |
| 10 or more | 100 |

Service for vesting purposes includes unused sick leave but does not include unused annual leave.

Participants are 100% vested in their employee contributions.

## Termination

A participant terminating employment may elect a refund of their own contributions with interest or leave contributions in the fund and receive a monthly benefit to commence at normal retirement date equal to the vested accrued benefit as of the date of termination. A refund will cause the forfeiture of any vested accrued benefit.

## Pre-retirement Death Benefits

| | |
|---|---|
| Hired before September 1, 2011: | If not disabled immediately prior to date of death, 75% of vested accrued benefit at death<br>If disabled immediately prior to date of death- 75% of disability benefit currently being paid<br>Benefit prior to application of 75% cannot exceed 80% of Average Monthly Salary at death. |
| Hired after August 31, 2011: | Greater of 75% of 2.00% times service accrued times vested percentage times average of the highest consecutive 36 months of salary at death *and* 75% of vested accrued benefit at date of death<br>Benefit prior to application of 75% cannot exceed 70% of Average Monthly Salary at death. |
| All Participants: | Eligible beneficiaries are the spouse or children under age 23 (18 if not in post-secondary school).<br>Beneficiaries can elect to receive a refund of employee contributions in lieu of an annuity benefit. |

## Post-retirement Death Benefit

If an active participant who is eligible to retire, or a disabled or retired participant dies, 75% of the accrued pension benefit is payable to the beneficiary. Eligible beneficiaries are the spouse or unmarried children under 23 (18 if not in post-secondary school). This benefit only applies to participants hired prior to September 1, 2011 who elected beneficiary coverage and participants hired after August 31, 2011 who elected a joint and survivor benefit.

## Participation

Sworn members of the Atlanta Police Department

## Employee Contributions:

| Employee | % of Base Salary for Participants Hired after December 31, 1983 and before September 1, 2011 | % of Base Salary for Participants Hired after August 31, 2011 |
|---|---|---|
| Unmarried employees without beneficiaries | 12% | 11.75% |
| Unmarried employees with beneficiaries | 13% | 11.75% |
| Married employees | 13% | 11.75% |

Employee contributions earn 5% simple interest each year.

## Cost-of-Living Adjustments (COLAs)

Benefits for retirees and beneficiaries are adjusted annually with compound interest on January 1 of each year based on the change in the Consumer Price Index from November 1 through October 31 of the preceding year.

Hired before September 1, 2011: Such annual adjustment cannot exceed 3%; also applied to Hybrid Participants' benefits for service prior to November 1, 2011. For years in which CPI exceeds 3%, the excess is added to a bank which is used to increase the COLA in years where CPI is below 3%.

Hired after August 31, 2011 and employed or reemployed on or after January 1, 2025:
Such annual adjustment cannot exceed 2%; also applied to Hybrid Participants' benefits for service after October 31, 2011.

Hired after August 31, 2011 and no longer employed on January 1, 2025:
Such annual adjustment cannot exceed 1%; also applied to Hybrid Participants' benefits for service after October 31, 2011.

## Changes in plan provisions

Participants hired between July 1, 2010 and August 31, 2011 who were actively employed on January 1, 2025 became eligible to elect to be covered under the same provisions as those hired prior to July 1, 2010. All participants in this plan elected to be covered under the provisions for those hired prior to July 1, 2010. Specifically:

- Normal Pension eligibility changed from age 55 with 15 years of service to age 55 with 10 years of service.
- The benefit multiplier increased from 2% to 3%.
- The cap on the monthly benefit amount decreased from 100% to 80% of Average Monthly Salary.
- Early retirement eligibility changed from any age with 15 years of service to any age with 10 years of service.
- The multiplier used in the recalculated monthly amount payable at normal retirement for surviving disabled participants increased from 2% to 3%.
- The vesting schedule for participants with 10 or more years of service changed from 50% at 10 years, increasing 5% per year until reaching 70% at 14 years, followed by 100% at 15 years to 100% at 10 years or more.

Participants hired after August 31, 2011 who were actively employed on January 1, 2025 as well as any new participants hired on or after January 1, 2025 are subject to the following changes:

- Normal Pension eligibility changed from age 57 with 15 years of service to age 57 with 10 years of service.
- The benefit multiplier changed from 1% to the tiered formula described earlier in this exhibit.
- The averaging period for Average Monthly Salary was changed from 120 months to 60 months.
- The cap on the monthly benefit amount decreased from 80% to 70% of Average Monthly Salary.
- Early retirement eligibility was changed from age 47 with15 years of service to age 47 with 10 years of service.
- Disability benefits were modified to incorporate the new eligibility and benefit amounts.
- The vesting schedule for participants with 10 or more years of service changed from 50% at 10 years, increasing 5% per year until reaching 70% at 14 years, followed by 100% at 15 years to 100% at 10 years or more.

# Section 4: Actuarial Valuation Basis

- Service for calculating Normal Pension eligibility, Early Retirement eligibility, Vesting, and benefit amounts was updated to include unused sick leave.

- The employee contribution rate was increased from 8% to 11.75%.

- The cap on the COLA was increased from 1% to 2%.

# Appendix A: Definition of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

| Term | Definition |
|---|---|
| Actuarial accrued liability for actives | The equivalent of the accumulated normal costs allocated to the years before the valuation date. |
| Actuarial accrued liability for retirees and beneficiaries | Actuarial Present Value of lifetime benefits to existing retirees and beneficiaries. This sum takes account of life expectancies appropriate to the ages of the annuitants and the interest that the sum is expected to earn before it is entirely paid out in benefits. |
| Actuarial cost method | A procedure allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability that are used to determine the actuarially determined contribution. |
| Actuarial gain or loss | A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., assets earn more than projected, salary increases are less than assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results yield actuarial liabilities that are larger than projected. |
| Actuarially equivalent | Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions. |
| Actuarial present value | The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. Each such amount or series of amounts is:<br>Adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.)<br>Multiplied by the probability of the occurrence of an event (such as survival, death, disability, withdrawal, etc.) on which the payment is conditioned, and<br>Discounted according to an assumed rate (or rates) of return to reflect the time value of money. |

# Appendix A: Definition of Pension Terms

| Term | Definition |
|---|---|
| Actuarial present value of future benefits | The Actuarial Present Value of benefit amounts expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age, anticipated future compensation, and future service credits. The Actuarial Present Value of Future Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive members entitled to either a refund of member contributions or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due. |
| Actuarial valuation | The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan, as well as Actuarially Determined Contributions. |
| Actuarial value of assets | The value of the Plan's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly plans use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the Actuarially Determined Contribution. |
| Actuarially determined | Values that have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the Plan. |
| Actuarially determined contribution | The employer's contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under the Plan's funding policy. The ADC consists of the Employer Normal Cost and the Amortization Payment. |
| Amortization method | A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the Unfunded Actuarial Accrued Liability. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the Unfunded Actuarial Accrued Liability. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase. |
| Amortization payment | The portion of the pension plan contribution, or ADC, that is intended to pay off the Unfunded Actuarial Accrued Liability. |
| Assumptions or actuarial assumptions | The estimates upon which the cost of the Plan is calculated, including:<br>**Investment return** — the rate of investment yield that the Plan will earn over the long-term future;<br>**Mortality rates** — the rate or probability of death at a given age for employees and retirees;<br>**Retirement rates** — the rate or probability of retirement at a given age or service;<br>**Disability rates** — the rate or probability of disability retirement at a given age;<br>**Withdrawal rates** — the rate or probability at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement;<br>**Salary increase rates** — the rates of salary increase due to inflation, real wage growth and merit and promotion increases. |

# Appendix A: Definition of Pension Terms

| Term | Definition |
|---|---|
| Closed amortization period | A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example, if the amortization period is initially set at 20 years, it is 19 years at the end of one year, 18 years at the end of two years, etc. See Open Amortization Period. |
| Decrements | Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or withdrawal. |
| Defined benefit plan | A retirement plan in which benefits are defined by a formula based on the member's compensation, age and/or years of service. |
| Defined contribution plan | A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance. |
| Employer normal cost | The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions. |
| Experience study | A periodic review and analysis of the actual experience of the Plan that may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified based on recommendations from the Actuary. |
| Funded ratio | The ratio of the Actuarial Value of Assets (AVA) to the Actuarial Accrued Liability (AAL). Plans sometimes also calculate a market funded ratio, using the Market Value of Assets (MVA), rather than the AVA. |
| GASB 67 and GASB 68 | Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 67 sets the rules for the systems themselves. |
| Investment return | The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next. |
| Net Pension Liability (NPL) | The Net Pension Liability is equal to the Total Pension Liability minus the Plan Fiduciary Net Position. |
| Normal cost | The portion of the Actuarial Present Value of Future Benefits and expenses, if applicable, allocated to a valuation year by the Actuarial Cost Method. Any payment with respect to an Unfunded Actuarial Accrued Liability is not part of the Normal Cost (see Amortization Payment). For pension plan benefits that are provided in part by employee contributions, Normal Cost refers to the total of member contributions and employer Normal Cost unless otherwise specifically stated. |
| Open amortization period | An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. If the initial period is set as 30 years, the same 30-year period is used in each future year in determining the Amortization Period. |

# Appendix A: Definition of Pension Terms

| Term | Definition |
|---|---|
| Plan Fiduciary Net Position | Market value of assets. |
| Service costs | The portions of the actuarial present value of projected benefit payments that are attributed to valuation years. |
| Total Pension Liability (TPL) | The actuarial accrued liability under the entry age normal cost method and based on the blended discount rate as described in GASB 67 and 68. |
| Unfunded actuarial accrued liability | The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative, in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus or an Overfunded Actuarial Accrued Liability. |
| Valuation date or actuarial valuation date | The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Benefits is determined. The expected benefits to be paid in the future are discounted to this date. |